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**14. ABSTRACT:** During Operation DESERT SHIELD, U.S. forces were deployed using a TPFDD (Time Phased Force Deployment and Data) process, albeit with mixed reviews. During Operation IRAQI FREEDOM, however, the Secretary of Defense decided to scrap the TPFDD process in favor of a new Request for Forces (RFF) process. Today, both processes are still being used, but the utility of each is the subject of question. This paper analyzes the mechanics of the TPFDD process and its ensuing use during Operation DESERT SHIELD. Subsequently, the mechanics of the RFF process is analyzed, along with its use during Operation IRAQI FREEDOM. The mechanics of each process are then compared, with the end results showing that the TPFDD process provides far more detail and meaningful planning data to aid planners and commanders in designing a major operation or campaign. The RFF process, on the other hand, lacks the substance that is necessary to plan and execute major operational deployments. Finally, the advent of new planning processes and systems will keep the TPFDD process viable now and in the foreseeable future.

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**Force projection, at the right time and place, is a critical component to Operational Art; consequently, TPFDDs remain relevant, now and in the foreseeable future**


**by**


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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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**31 October 2008**

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**Abstract**

During Operation DESERT SHIELD, U.S. forces were deployed using a TPFDD (Time Phased Force Deployment and Data) process, albeit with mixed reviews. During Operation IRAQI FREEDOM, however, the Secretary of Defense decided to scrap the TPFDD process in favor of a new Request for Forces (RFF) process. Today, both processes are still being used, but the utility of each is the subject of question. This paper analyzes the mechanics of the TPFDD process and its ensuing use during Operation DESERT SHIELD. Subsequently, the mechanics of the RFF process is analyzed, along with its use during Operation IRAQI FREEDOM. The mechanics of each process are then compared, with the end results showing that the TPFDD process provides far more detail and meaningful planning data to aid planners and commanders in designing a major operation or campaign. The RFF process, on the other hand, lacks the substance that is necessary to plan and execute major operational deployments. Finally, the advent of new planning processes and systems will keep the TPFDD process viable now and in the foreseeable future.

One of the most critical factors for the success of a campaign or major operation is the timely strategic and/or operational deployment of combat forces from their home bases or staging areas into the theater. The deployment should be considered not a supporting plan but the very heart of the plan for the major combat phase of a campaign or major operation.

Milan N. Vego, *Joint Operational Warfare*

## Introduction

War, as defined by Clausewitz, is "an act of force to compel our enemy to do our will."[1]

Wars, limited and unlimited, between belligerents have taken place for centuries. The

tactics, techniques and procedures have evolved, as have the societies that battled one and

other; however, there is one aspect of war that has not changed—the prerequisite to bring

combat forces to the battlefield. The aim is to project the right forces, at the right time, and

in the right place in order to defeat the enemy. The forces, to include all necessary resources,

are the means to accomplish a sequence of actions in order to achieve political or military

objectives. During Operation IRAQI FREEDOM (OIF), Secretary of Defense (SECDEF)

Rumsfeld identified seven military objectives, which included (1) putting an end to Saddam

Hussein's regime, (2) getting rid of terrorists and (3) creating a representative government

that will exist peacefully in the region.[2] The U.S. military, along with coalition forces, did

achieve the first objective identified above; however, the two remaining objectives identified

above have yet to be accomplished. Accordingly, it can be argued that the force deployment

planning and execution process influenced the outcome with regards to achieving (or not) the

objectives identified by the SECDEF. Department of Defense (DOD) doctrine at the outset

of OIF prescribed that we plan and execute deployments through a TPFDD (or Timed Phased

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[1] Carl von Clausewitz, *On War*, Edited by Machael Howard and Peter Paret (Princton, Princeton University Press, 1984), 75.
[2] Jim Garamone, "Rumsfeld Lists Operation Iraqi Freedom Aims, Objectives," *American Forces Press Service News Articles*, March 21, 2003. http://www.defenselink.mil/news/newsarticle.aspx?id=29253 (accessed September 27, 2008).

Force Deployment and Data—pronounced "Tip-fid") process. However, our forces were deployed in support of OIF using a new Request for Forces (RFF) process. Despite the fact that the TPFDD process has been criticized as cumbersome and lacking in flexibility, it still remains the better process—as opposed to the RFF process used during OIF—to plan and execute force deployments in support of major operations because it provides the detail that is necessary to project forces and support the operational commander's vision.

While some would argue that the two processes are not germane for comparison, this is clearly not the case. Both processes were used to deploy forces in two significant operations since 1990—Operation DESERT SHIELD and OIF—and the processes were significantly different, contributing to different levels of success. Moreover, as a result of OIF, notable assessments were made to differentiate the processes. To be sure, SECDEF Rumsfeld scrapped the TPFFD process and later stated, "The deployment and redeployment process was—I don't want to say 'ugly,' but it was—I suppose a nice way to say it—it was imperfect."[3] He further described the TPFDD as a "crude instrument."[4] Former Vice Chairman of the Joint Chiefs of Staff, when asked about throwing out the TPFDD, stated "It was a conscious decision to do away with the TPFDD [process].…"[5] The two components with the largest forces that deployed into Iraq, the Army and Marine Corps, have strong views on these deployment processes. In short, the Army considers the processes radically different—the TPFDD process being absolutely essential to successfully executing their

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[3] Donald H. Rumsfeld, Secretary of Defense (Town Hall Meeting, Lackland Air Force Base, San Antonio, TX 25 August 2003). http://www.defenselink.mil/speeches/speech.aspx?speechid=511 (accessed September 12, 2008).
[4] Ibid.
[5] Gen Peter Pace, Vice Chairman, Joint Chiefs of Staff (address, Defense Writers Group, 24 September 2003). http://www.jcs.mil/vice_chairman/speeches/ defense_writers_group.html (accessed September 12, 2008).

operational plan; the RFF process falling well short in numerous aspects that were necessary to achieve military objectives.[6] The Marines had very similar views to the Army.[7]

## Background

The TPFDD is the Joint Operation Planning and Execution System (JOPES) database portion of an operations plan that is used to plan and manage the movement of forces and non-unit cargo and equipment from their point of origin to their final destination.[8] It enables operational art and campaign design by providing tools to effectively sequence and/or synchronize the flow of forces into the theater of operations according to the operational commander's vision or scheme of maneuver in order to achieve his desired end-state. The TPFDD can be thought of as the glue that binds the *ends*, *ways* and *means*—or the objectives, operational design and the resources required. TPFDDs contain voluminous amounts of critical information; however, this section will focus on information that is most relevant for planners and commanders—what forces are required, where are they coming from and where are they going, when they are required and how they will get to their destination (*who*, *where*, *when* and *how*). This information is input into the JOPES database; the *what* and *why* is provided in the operation order. In short, a TPFDD is how an operational commander can visualize his deployment plan and prioritize his force flow into a theater of operations.

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[6] Thomas R. Ricks, *Fiasco: The American Military Adventure in Iraq*, (New York: Penguin Books, 2007), 71.
[7] U.S. Marine Corps. *Concepts and Programs.* Programs and Resources Department. (Washington, D.C.: Headquarters U.S. Marine Corps, 2005), 218.
[8] It should be noted that the term JOPES and TPFDD were (and still are) often used synonymously throughout the DOD. Joint Publication 1-02 defines JOPES as "a system of joint policies, procedures, and reporting structures supported by communications and computer systems, that is used by the joint planning and execution community to monitor, plan, and execute mobilization, deployment, employment, sustainment, redeployment, and demobilization activities associated with joint operations." The TPFDD is merely the database portion of an operation plan that is developed using JOPES. Therefore, when planners develop a TPFDD, they are using JOPES—the JOPES database—however, the TPFDD itself is not JOPES. Military members sometimes confuse the two terms; yet, frequently the terms are used interchangeably without confusion.

With the above in mind, TPFDDs are developed regressively (or should be) based on the operational commander's desired end-state for the operation. By knowing the intended outcome, planners can then sequence and synchronize actions that are required to achieve the desired end-state; this where the TPFDD proves most valuable. The sequence and synchronization of actions requires specific forces (people and equipment) at specific times and at specific locations—these three requirements are identified in TPFDDs (*who*, *when*, and *where*). The *how* is also provided in the TPFDD, but is a function of many things, including strategic lift assets available (e.g., airplanes and ships), ports of embarkation (POE) and ports of debarkation (POD) to be used, distances to travel, over-flight permissions required, and much more.

During the deployment planning phase of an operation, the factors of time, space and force are considered in detail. This is done by analyzing the TPFDD with various computer simulation models, such as the Joint Flow and Analysis System for Transportation, which can be used to determine the strategic transportation feasibility. There are other models available to analyze movement from unit home stations to POEs, as well as models to analyze reception, staging, onward movement and integration (RSOI) from the POD to the final destination. These models can provide force closure estimates based on a host of facts or assumptions such as: strategic lift assets available, road infrastructure, mobilization timelines, number of people to move, the amount and size of equipment to move, the sequencing of forces (both people and equipment), home stations, POEs/PODs, material handling equipment and other port enablers, approved or disapproved country over-flight requests, and distances, among many other criteria. Based on the planning factors (either known facts or assumptions) input into the models when analyzing the TPFDD, various

decision making data is provided in the form of charts, graphs, tables and the like. This data

identifies *go*, *slow-go* and *no-go* criteria for the development of the deployment plan.

Planners and commanders can also change the scenario—either the planning factors (again,

based on new facts or assumptions) or the force sequencing—and analyze alternate

operational designs or courses of action.

Another critical capability of deployment planning with a TPFDD is the ability for

multiple commands and organizations within the Joint Planning and Execution Community

(JPEC) to access one common database that is designated to support an operation.

Importantly, each organization can see the same force composition and sequencing that has

been input into the JOPES database. For example, force providers or component commands

can populate a TPFDD with force capabilities, regional combatant command planners can

then plan the sequence of the forces based on effects that must be achieved, and finally

United States Transportation Command (USTRANSCOM) planners can begin strategic

transportation planning and analysis, which includes modeling the TPFDD. Throughout the

process, planners from each organization can communicate priorities and planning

assumptions, provide feedback based on different levels of planning and analysis, and then

incorporate changes as required. In reality this is a time consuming and tedious process, but

absolutely necessary.[9]

The RFF process is quite different from the TPFDD process, and from the initial

appearance seems to be quite simpler, more flexible and more responsive. While the RFF

process is now formally identified as a deployment process in joint doctrine, it has evolved

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[9] This is based on the author's personal experience while assigned as a planner in the J-3, U.S. Transportation
Command from August 2001 – June 2004.

since its inception during OIF planning in the fall of 2002.[10]  Procedures used during OIF

will be used to describe the process, especially since this has been the only time that the

process was used to plan and execute force deployments at the outset of a major operation.

The process begins when a component command, such as United States Army Central,

identifies forces to United States Central Command (USCENTCOM) that are necessary to

support an operation or campaign plan.  In turn, USCENTCOM submits an RFF in DMS

GENSER[11] message format to the SECDEF via the Chairman of the Joint Chiefs of Staff for

approval. The SECDEF then approves, disapproves, modifies or groups the request with

other requests.  Finally, assuming some form of approval, the SECDEF issues a deployment

order (DEPORD) for the approved forces, which may or may not match the original RFF.  At

this point, planners can begin coordinating the details to deploy the forces that have been

approved in the DEPORD.

   As a result of implementing the Global Force Management (GFM) and Joint Force

Provider (JFP) construct, the process has changed and now includes input by United States

Joint Forces Command (USJFCOM), who is the conventional forces provider, as well as

other force providers.[12]  With the advent of GFM/JFP, JFCOM, combatant commands,

service headquarters, and service components all have the ability to analyze RFFs and make

force recommendations to the SECDEF based on current and future force availability and

current and projected readiness.[13]  The process is currently being used primarily to source

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[10] Chairman, U.S. Joint Chiefs of Staff. *Deployment and Redeployment Operations*, Joint Publication (JP) 3-35 (Washington D.C.: CJCS, 7 May 2007), I-4.
[11] Official messages are commonly referred by the acronyms alone, which are DMS (Defense Message System) and GENSER (General Service).
[12] Michael Ferriter and Jay Burdon. "The Success of Global Force Management and Joint Force Providing," *Joint Forces Quarterly*, (1st Quarter, January 2007): 45-46.
[13] Ibid., 45.

U.S. forces. It has not been used to plan and execute force deployments for a new major operation—more specifically, a new operational design.

Even though the RFF process has evolved over the years, it is missing critical information, and this is the key difference between the RFF and the TPFDD processes. The actual RFF normally identifies specific units by name; however, it does not provide the *who*, *where*, *when*, and *how* details that planners and commanders need to design the deployment plan. RFFs do not provide the exact numbers of passengers, along with their associated equipment; they do not provide the point of origin, POE or POD; they do not provide the exact dates that the forces must be moved; and they do not provide the specifics of how the forces should be moved. Since RFFs are submitted in GENSER message format vice a database, they cannot be run through modeling and simulation programs to determine optimum sequencing and synchronization. Therefore, the RFFs do not adequately take into account the implications that will be discovered only upon execution of the deployment. Additionally, since RFFs are submitted and approved by GENSER message, there is no automated means to track the status of the RFFs; this necessitated that component commands develop a means to track the status of RFFs, which was an exhaustive undertaking that often duplicated existing procedures.[14]

## Analysis

The current TPFDD process had its roots established in the late 1980s, when it was used in support of contingency planning for Operation JUST CAUSE,[15] as well as force deployment planning conducted in support of United States Central Command's

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[14] U.S. Marine Corps. *Concepts and Programs.* 218.
[15] Ronald H. Cole, *Operation Just Cause: The Planning and Execution of Joint Operations in Panama.* (Washington DC: Office of the Chairman of the Joint Chiefs of Staff, 1995), 8.

(USCENTCOM) Operations Plan 1002-88.[16]  Though used during Operation JUST CAUSE

planning, the Supported and Supporting Commanders decided, for various reasons, not to

deploy forces using the TPFDD.[17]  It should also be noted that during the late 1980s and

early 1990s, deployment planning using JOPES and a TPFDD were still immature processes

for the DOD, and neither had been tested in real world contingencies until Operation

DESERT SHIELD in 1990.[18]

During Operation DESERT SHIELD, deployment execution with a TPFDD received

mixed reviews; however, the end result is generally considered a success.  As previously

mentioned, planning in JOPES and with a TPFDD was a relatively new process, using a new

computer database system, and had not been tested in a real crisis.  Thus, numerous problems

were encountered when deployment execution began.  First of all, manipulating the JOPES

database (i.e., the TPFDD) was an excruciatingly painful and tedious process, especially

considering the computer and software technology at the time, and it required substantial

training, which was lacking at the time.[19]  To many planners and leaders, executing the

deployment with a TPFDD simply was not responsive and flexible enough in a fluid, fast

paced environment.  Early in the deployment the USCENTCOM Commander frequently

changed unit priorities in the force flow, but the changes could not be updated quickly

enough in the TPFDD.  Additionally, information was frequently input into the JOPES

database with multiple errors.  Errors included incorrect passenger numbers, inaccurate

equipment information, wrong POEs/PODs, and even the scheduling of units for movement

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[16] Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Volume I Planning and Command and Control.* (Washington D.C.: Air Force History Office, 1993), 21.
[17] James K Matthews and Cora J Holt, *So Many, So Much, So Far, So Fast: United States Transportation Command and Strategic Deployment for Operation Desert Shield/Desert Stor*, (Washington D.C.: Office of the Chairman of the Joint Chiefs of Staff and United States Transportation Command, 1996), 21.
[18] Ibid., 21-25.
[19] Ibid., 22.

that no longer existed.[20]  Consequently, there was a lack of visibility of forces (both troops

and equipment), which made it extremely difficult to schedule strategic transportation assets

(airlift and sealift) and estimate force closure in the theater of operations.  This resulted in

airplanes unexpectedly arriving at airports, too many airplanes arriving at airports, too few

airplanes arriving at airports, the wrong type of airplanes arriving at airport, units not

prepared when airplanes arrived, and the list goes on.[21]  The CENTCOM Commander did not

have totally accurate visibility of his force composition at any given time during the

deployment.  At one point, General Schwarzkopf stated, "since 16 January our personnel

strength [in theater] has increased by 71,800 and now stands at 525,920.  I'm concerned that

20 percent of that increase [14,360] was not in the TPFDD and therefore unplanned and

invisible to this headquarters."[22]  At the beginning of the deployment, planners and leaders

had little assurance that the new process worked.

Ultimately, USTRANSCOM and USCENTCOM were able to work out procedures that

enabled JOPES and the TPFDD to effectively support the deployment.  While there were

many lessons learned, two are especially critical.  First, training was paramount and it was

seriously lacking; because this was a relatively new system, the lack of familiarity throughout

the DOD arguably caused the majority of problems.  Second, regional combatant

commanders needed to take a greater responsibility for deployment planning and execution,

especially early in the process.[23]  To address these deficiencies, USTRANSCOM deployed a

team to assist USCENTCOM planners at McDill Air Force Base in the use of the JOPES

database, deployed a team into the area of operations to improve coordination, accelerated

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[20] Ibid., 21-23.
[21] Ibid., 22.
[22] Ibid., 24.
[23] Ibid., 25.

the development the next JOPES database version, and accelerated the development of a transportation flow and analysis system in order to provide quicker force closure estimates.[24] For USCENTCOM's part, a greater degree of discipline was directed with regards to executing the deployment with the JOPES database, which ultimately facilitated using JOPES as it was intended.[25] By addressing these critical deficiencies, both USCENTCOM and USTRANSCOM gained greater visibility and control throughout the remainder of the deployment. USCENTCOM's Director of Operations concluded that they "would never have been able to achieve the remarkable success of Operation DESERT SHIELD without JOPES….JOPES appears now to have come of age and will, in the future, be an essential part of all deployment operations."[26]

The RFF process, as previously mentioned, took root during USCENTCOM's OIF planning late in 2002. It was during this timeframe that USCENTCOM presented the SECDEF a TPFDD to support OIF that consisted of over 300,000 military forces and associated equipment. The SECDEF was concerned that by approving the TPFDD, he would be limiting the President's diplomatic options by starting the deployment of troops before the New Year.[27] An underlying assumption was that once the TPFDD of approximately 300,000 troops was approved, the valve would not be turned off until the bucket was empty.[28] That is, all troops and equipment would deploy to the theater of operations and the deployment would have ended once the last soldier, airman, sailor or Marine identified in the TPFDD arrived in theater of operations. The SECDEF viewed the TPFDD process as archaic and he did not want to use this approach; as a result, he decided to do away with the TPFDD process

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[24] Ibid., 24-25.
[25] Ibid., 24.
[26] Ibid., 25.
[27] Bob Woodward, *Plan of Attack.* (New York: Simon and Schuster, 2004), 232-233.
[28] Ibid., 233.

because he wanted the ability to personally decide which forces would deploy to the theater

of operations and when they would deploy.[29]   In its place, the SECDEF implemented the

RFF process, which he believed was more flexible and responsive, and it allowed him to

meter the flow of U.S. forces by opening and closing the valve as he deemed necessary, as

well as actually adding or deleting U.S. forces.  The Army equated this process to "pulling

cogs at random out of a machine."[30]   In short, the RFF process severely limited the

operational commander's ability to determine the deployment planning and execution.  Milan

Vego points out that "In practice, operational and even the most basic tactical decisions are

all too often made by the highest political or military-strategic leadership…more often than

not they do a lot of damage."[31]  This was arguably the case in the decision to deploy forces

with the RFF process, where the SECDEF decided when forces of his choosing would

deploy—the implications were far-reaching.

During 2002 and 2003, over 100 RFFs were submitted for approval to support OIF.

RFFs routinely took from one week to several weeks to be approved by the SECDEF,

whereby a DEPORD would be issued, and often with modifications.  Sometimes a single

RFF would be approved and one DEPORD issued; on other occasions several RFFs would be

grouped and a single DEPORD was issued for the entire grouping.  To make matters worse,

the bureaucratic approval process caused many DEPORDs to be signed with a required

delivery date into the theater of operations that had already passed.[32]  In turn, this caused

significant problems with the sequencing of forces and allocating precious strategic

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[29] Michael R. Gordon and General Bernard E. Trainor, *Cobra II: The Inside Story of the Invasion and Occupation of Iraq.* (New York: Pantheon Books, 2006), 97.
[30] James Fallows, "Blind into Baghdad," *The Atlantic Monthly* 293, no. 1 (Jan/Feb 2004): 64.
[31] Milan N. Vego, *Joint Operational Warfare: Theory and Practice*, (Newport: United States Naval War College, 2007), X-68.
[32] Gen John W. Handy, Commander, U.S. Transportation Command, "An Oral History," interview by Dr. Jay H. Smith and Lillian Nolan, (Scott Air Base: June 2007).

transportation assets.  The former USTRANSCOM Commander stated in an interview that, "The challenge was getting enough deployment orders approved so that we had some time, 30 to 45 days, to plan the transportation assets against these sequential and simultaneous deployment orders, and negotiate with CENTCOM on what order we could move them."[33] In addition, it is by detailed analysis and modeling force requirements in a TPFDD that USTRANSCOM planners can determine the amount of strategic lift assets that are required to move the force in a given period of time.  Arguable, the force requirements that were laid out in the original OIF TPFDD, which planners continually modified even though the RFF process was being used, provided USTRANSCOM leadership the framework to determine that activating the Civil Reserve Air Fleet Stage I was necessary to support USCENTCOM's plan.[34]  The reality was that the RFF process was not more flexible and responsive because every RFF had to be analyzed in detail by planners—the *who*, *when*, *where* and *how* had to be answered in order to execute the deployment—and this took a lot of painstaking time. Even more to the point, the operational commander did not know exactly what forces would be approved, nor when they would arrive in the theater of operations.

Another unintended consequence of the RFF process was the degradation of logistics capabilities that were required to support the deploying forces.[35]  Logistics units were a favorite target for cutting or moving later in the force flow.  For instance, the Army's Theater Support Command gets a tremendous amount of logistics capability from their mobilized reservists who run the airports and seaports.  Many of these reservists were activated later

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[33] Ibid.
[34] Civil Reserve Air Fleet (referred to as CRAF) is a partnership between the commercial airlines and DOD created to ensure that sufficient airlift is available for deployments in the event of contingencies or war.  Source: U.S. Transportation Command; this is based on the author's personal experience while assigned as a planner in the J-3, U.S. Transportation Command from August 2001 – June 2004.
[35] Gordon and Trainor, *Cobra II*, 99.

than initially planned, and their late arrival into the theater of operations hampered the overall force deployments.[36] In addition to the soldiers, material handling equipment was in short supply, which was essential to expeditiously offload airplanes and ships and to clear marshalling areas. Likewise, personnel and equipment sequencing was adversely impacted. In nearly all instances combat troops were flown into the theater of operations and their combat equipment (e.g., tanks, trucks, artillery, helicopters, etc.) was transported by sealift, which obviously takes much longer to transport. Synchronizing the two so that they link-up simultaneously is another one of those painstaking tasks for planners that cannot be ignored. For the Marines, the RFF process had the effect of de-synchronizing combat and combat service support (CSS) units with their equipment. Marine Corps heavy equipment had to be off-loaded from ships before associated drivers arrived. In many instances, Marine units were scrambling just to find drivers who were qualified to drive equipment off ships.[37] Additionally, CSS units that provided much needed logistics support to combat units arrived later than planned and this affected the Marines throughout the combat phase of the operation.[38] Insufficient logistics capabilities, especially at the ports of debarkation, had the domino effect of slowing RSOI operations. In turn, this slowed the deployment because troops and equipment became clogged at the port.

The disapproval or delay of Army units that resulted from the RFF process had other unintentional outcomes. While some argued that CENTCOM never really had a plan for phase IV operations (post-combat phase),[39] others argue that had entire Army divisions not

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[36] Ibid., 99.
[37] LtCol Pat Kelleher, interviewed by author, 14 October 08. LtCol Kelleher served as Operations Officer, 2nd Transportation Support Battalion, 2nd Marine Logistics Group during OIF I.
[38] LtCol Michael S. Groen, *With the 1st Marine Division in Iraq, 2003: No Greater Friend, No Worse Enemy.* USMC Occasional Paper (Quantico, VA: History Division, Marine Corps University, 2006), 58.
[39] Gordon and Trainor, *Cobra II*, 138-140.

been disapproved or delayed, there would have been sufficient forces available to handle phase IV operations.[40] General Shinseki, former Army Chief of Staff, was especially critical of the removal of forces from the TPFDD; in his view they were essential to stabilize Iraq after phase III operations.[41] Another high-profile aspect of the war, Abu Ghraib, felt the unintended impact of the RFF process. A commission that was overseen by former SECDEF James R. Schlesinger determined that the disjointed deployment process separated military police units from their equipment and in turn prevented critical training prior to executing their mission; also, military police units arrived in theater tumultuously, in no specific order, and without equipment.[42] Conversely, the synchronization of troops (transported by air) and their equipment (normally transported by sealift) is a fundamental underpinning of the TPFDD process. The lack of training and equipment was determined to be a contributing factor in the Abu Ghraib prison scandal.

## Conclusions

While it is clear that the TPFDD process suffered initial lumps during Operation DESERT SHIELD, lessons were learned—specifically, the importance of training, as well as the necessity for command involvement in the deployment process. As a result, processes and procedures were improved, and systems have been updated. All of this continues today and the current JOPES process is no exception. Accordingly, the Adaptive Planning and Execution (APEX) System is systematically being implemented throughout the DOD and is

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[40] Fallows, "Blind into Baghdad," 64-65.
[41] Bernard Weinraub and Thom Shanker, "A Nation at War: Under Fire; Rumsfeld's Design for War Criticized on the Battlefield," *New York Times*, 1 April 2003. http://www.nytimes.com (accessed 8 September 2008).
[42] Gordon and Trainor, *Cobra II*, 100.

planned to eventually replace JOPES. [43]  APEX is focused on improving contingency and

crisis planning by enabling planners to conduct parallel collaborative planning among

supporting and supported commands, subordinate command elements, and across the JPEC. [44]

In respect to conducting deployment planning, there is no doubt that planning in the JOPES

database is a significant undertaking that requires considerable time and coordination, as well

as extensive training.  New programs, such as the Collaborative Force Analysis, Sustainment

and Transportation (CFAST) system are intended to replace the traditional JOPES database

that is used to build a TPFDD.  CFAST, a modern, web-based collaborative campaign

building environment, is envisioned to be more user-friendly and responsive than the JOPES

database, that provides deployment planning and analysis capability currently resident in the

TPFDD process. [45]  While CFAST is intended to replace the established JOPES database, the

underlying data that is resident in a TPFDD will still be resident in CFAST; the modeling

capabilities (some or all), if developed as planned, will be resident in CFAST vice being

stand along programs; and, the force planning, sequencing and synchronizing will still take

place, but only faster.  In essence, using CFAST will be analogous to a TPFDD process on

steroids—faster and with more capabilities.

A deployment planning and execution process must sufficiently support an operational

commander's ability to design and execute a newly assigned major operation or campaign—

in this regard, the RFF process used for OIF is considerably lacking.  The RFF process does

not consider a campaign plan on the whole; it does not consider the cause and effects, as well

as the timing and placement of forces to achieve the desired effects; it does not provide

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[43] Chairman, U.S. Joint Chiefs of Staff, *Adaptive Planning Roadmap II*, (Washington, D.C.: CJCS, March 2008), 6.
[44] Ibid., 6.
[45] Chairman, U.S. Joint Chiefs of Staff, *Adaptive Planning Roadmap II*, 89.

overall visibility of the force and movement requirement.  One only needs to consider the

impact of insufficient logistics enablers to conduct port operations during OIF, the timing and

lack of synchronization of troops and equipment that may have contributed to events at Abu

Ghraib, or the seriously inefficient use of strategic airlift assets at the outset of Operation

DESERT SHIELD.  Additionally, the RFF process does not have the ability to model and

simulate various courses of action and to determine if, for example, there are choke points in

the deployment process, limited transportation assets that must be considered, or insufficient

forces to accomplish a specific task.  Conversely, the TPFDD process provides tools for the

operational commander to choreograph and war game his force flow—through modeling and

simulation—into into the theater of operations and thereby aide in visualizing the unfolding

of events.  The TPFDD planning process can help determine, for instance, if adequate

logistics enablers will be available in the right location and at the right time to order to ensure

the timely offload of equipment for the entire force.  In summary, the TPFDD process

unveils nearly all of the details that can stop, slow or accelerate force deployments and,

therefore, provides planners and commanders the tools necessary to make informed

decisions.  For these reasons, the TPFDD process is superior to the RFF process that was

used for OIF, especially when planning future operations or campaigns.

A key difference between the processes that must be noted is the basic assumption that

forces will be available.  The TPFDD process generally assumes that specific forces will be

available for planning and execution.  The maturation of the RFF process into the GFM

process does not make this assumption primarily due to the fact that current operations in

Iraq and Afghanistan have committed a significant portion of U.S. forces.  This is one reason

that the RFF process is being used today.  However, it is being used primarily to source

forces, essentially swapping forces on a one for one basis, and this requires little (if any)

application of operational art.  In this respect, the RFF process is beneficial to source limited

U.S. forces that are available (or projected to be available) for potential operations.  It is

essential that the RFF process identify forces for regional combatant commands to begin

detailed planning.  However, detailed force deployment planning and execution must take

place in the TPFDD process or the future APEX process.  The RFF process alone, as used

during OIF, is not adequate.  The balancing act for GFM/JFP and the JPEC will be to source

forces and allow sufficient time for operational commanders to conduct detailed planning—

this is the goal of APEX.

 Regardless of the deployment process, one thing is clear—it must enable the operational

commander to achieve his desired end-state through the application of his operational or

campaign design.  This is done by sequencing tactical events that are designed to achieve

intended effects and subsequently connecting these events to other events in the campaign

design.[46]  Clausewitz describes this as "planning and executing these engagements

themselves, and of coordinating each of them with the others in order to further the object of

the war."[47]  In order to achieve these effects, or execute these engagements, where and when

force will be applied must be part of the campaign design.  If one accepts this notion, then

one should accept that "only the operational commander can properly plan and execute

deployment for a campaign or major operation."[48]  It is then, as described in joint doctrine,

the operational commander's responsibility to identify forces, plan and sequence their arrival

in the theater of operations at the right times and right locations, effectively execute RSOI,

ensure adequate resources are available through all phases of the operation, and ultimately

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[46] Vego, *Joint Operational Warfare*, I-4.
[47] Clausewitz, *On War*, 128.
[48] Vego. *Joint Operational Warfare*. IX-157.

achieve the desired objectives.[49]  This was a lesson learned during Operation DESERT

SHIELD; however, it appears that this lesson was ignored or forgotten during OIF.  The

SECDEF assumed much of the responsibility for determining which forces would deploy and

when they would deploy; this can be directly linked to the RFF process, where only the

SECDEF can approve RFFs.  The TPFDD process, in contrast, places this responsibility

squarely in the operational commander's hands.


### Recommendations

The analysis and conclusions presented above highlight the significant differences

between the TPFDD and RFF processes.  In today's environment, where U.S. forces are

committed in two major operations, there are benefits to both processes.  However, before

undertaking future major operations, the following recommendations should be considered.

First, the TPFDD process (or the future APEX process) should be used to plan and

execute force deployments.  Improvements in systems and processes, vis-à-vis APEX, will

continue to address previously identified deficiencies and make deployment planning and

execution more responsive and flexible.  The RFF process, as used during OIF, simply does

not have the wherewithal to support major operational deployments.

Second, the RFF (or GFM) process should be used in conjunction with the TPFDD

process, but only to source forces.  Once sourcing has been completed, deployment planning

and execution for the forces should be conducted using the TPFDD process.

Third, once the operational commander has been allocated forces to accomplish his

objectives, he must be given full latitude to conduct deployment planning and execution in a

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[49] JP 3-35, *Deployment and Redeployment Operations*, II-4, VI-3.

manner that supports his operational design.  Though this recommendation is not new, the

RFF process used during OIF serves as a reminder that this should be reemphasized.

**Summary**

This analysis has shown how both the TPFDD and RFF processes began, along with their

use in major operations.  While the RFF process may appear to be the quicker and more

flexible of the two procedures, the substance of this process is immensely shallow for

planning major operation or campaign deployments.  There simply is not enough detail

provided to thoroughly analyze all possible deployment courses of action, nor to anticipate

the cause and effect of events that may ultimately determine the outcome of an operation or

campaign.  The TPFDD process, on the other hand, provides substantial planning detail and

tools that are critical to designing a successful operation or campaign plan.  While both the

RFF and TPFDD processes will likely evolve into future APEX processes, the underpinnings

of the TPFDD process will remain absolutely necessary to effectively plan future operations.

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